

ABSTRACT

A surface treated steel plate for battery cases having an improved electrical contact with the battery positive electrode active material, its manufacturing method, a battery case, and a battery are disclosed. The surface treated steel plate has a graphite-dispersed nickel plating layer in which graphite is dispersed or a graphite-dispersed nickel alloy plating layer at least on the inner surface of a battery case. The alloy plating layer is preferably of a nickel-cobalt alloy, a nickel-cobalt-iron alloy, a nickel-manganese alloy, a nickel-phosphorus alloy, or a nickel-bismuth alloy. The battery case is produced by forming the surface treated steel plate by drawing, DI, or DTR. The battery uses the battery case.